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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,887	10/22/2001	Gunnar Flentje		7527
7590	09/23/2004		EXAMINER	
Gunnar Flentje 1223 Wilshire Blvd #316 Los Angeles, CA 90403			JACOBSON, TONY M	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/982,887	FLENTJE, GUNNAR
	Examiner Tony M Jacobson	Art Unit 2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 18 May 2004.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-19 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-19 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 22 October 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

***Priority***

1. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged. However, the provisional application upon which priority is claimed fails to provide adequate support under 35 U.S.C. 112 for claims 1, 8, and 14 (and therefore all dependent claims) of this application. The provisional application (serial number 60/242,228) does not support the limitation of maintaining "constant proportional quality of high frequencies in applied sound signals".

***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the controller having an infinite amount of tap positions and an infinite plurality of contacts respectively coupled to the infinite multiple tap positions along a continuously-tapped coil must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 4, 5, 11, 12, 17, and 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

5. Claims 4, 11, and 17 recite "said controller having infinite multiple positions corresponding to an infinite amount of tap positions along said continuously tapped

coil". Although it may be said that a Variac controller (as disclosed in Applicant's specification) has infinite multiple positions; in a conventional Variac, these infinite positions do not correspond to an infinite number of tap positions, but a finite number of tap positions where a wiper contact slides along the edge of an arcuate coil, progressively making contact with each succeeding turn or group of turns of the coil. If Applicant has invented a new type of Variac with an infinite number of tap positions, it must be disclosed in such a way as to enable one of ordinary skill in the art to make and use the invention.

6. Claims 5, 12, and 18 recite "wherein said controller has an infinite plurality of contacts, respectively coupled to the infinite multiple tap positions along said continuously tapped coil". Applicant has not disclosed a controller having an infinite plurality of contacts in such a way as to enable one of ordinary skill in the art to make and use the invention.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 4 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 4 recites the limitation "said first and second parts of said variable frequency-sensitive second impedance means" in lines 11-13 of the claim. There is insufficient antecedent basis for this limitation in the claim. Neither claim 4 nor claim 1 upon which it depends makes any prior mention of first and second parts of the variable frequency-sensitive second impedance means.

10. Claim 7 recites the limitation "said second variable frequency-sensitive impedance means" in lines 2-3 of the claim. There is insufficient antecedent basis for this limitation in the claim. Neither claim 7 nor claim 1 make any prior mention of a second variable frequency-sensitive impedance means. For examination purposes, it will be assumed that Applicant intended to recite "said variable frequency-sensitive second impedance means".

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-3, 6-10, 13-16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scholz (US 4,363,934) in view of Lowell (US 5,054,076).

13. Because Applicant has not indicated any amendment to the claims, it is assumed that the original claims remain pending. Those claims accordingly remain rejected on the grounds presented in the previous Office action.

14. Claims 4, 5, 11, 12, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scholz (US 4,363,934) in view of Lowell (US 5,054,076) as applied to claims 1, 8, and 14 above, and further in view of Gonzalez (Reference U) as set forth in the prior Office action.

***Response to Amendment***

15. The amendment to the specification filed 22 April 2004 has been entered; however, it does not conform to 37 CFR 1.121 because: the use of single square brackets to indicate deleted text in the replacement paragraph does not comply with 37 CFR 1.121(b)(1)(ii), which requires deleted matter to be indicated by strike-through, except that double brackets placed before and after the deleted characters may be used to show deletion of **five or fewer consecutive characters**. Any subsequent amendment must conform to 37 CFR 1.121 or the applicable section of 37 CFR to be allowed entry.

***Response to Arguments***

16. Applicant's arguments filed 18 May 2004 have been fully considered but they are not persuasive.

17. The examiner agrees with Applicant that a correct technical definition of a regular variac is "a device having a controller having infinite multiple positions corresponding to a finite amount of tap positions along a continuously tapped coil". The examiner erred in reciting at page 10, paragraph 19, lines 10-15 that Gonzalez discloses a variac having "... infinite multiple positions corresponding to an infinite amount of tap positions along the continuously tapped coil ..." (as claimed by Applicant). The examiner intended to recite "... a finite amount of tap positions ..."; however, since this limitation was also rejected under 35 USC § 112, first paragraph as not being enabled by the disclosure, the error is substantially irrelevant.

18. Many of Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

19. Regarding Applicant's argument that "If a combination of the elements shown in the references Scholz, Lowell and Gonzalez would have been obvious to the ones skilled in the art, such a combination would then have been made already by those skilled in the art because it solves two major problems that occur in this technology and are not solved by the state of the art at present", this is not the standard by which obviousness is judged. If such a combination had already been made, the present claims would have been rejected under 35 U.S.C. § 102 as being anticipated by such construction. (See statement of statutory basis for 35 U.S.C. 103(a) rejections, above.)

20. Regarding Applicant's argument that "Prior art has not been able to provide continuous dial", this feature is disclosed by Gonzalez, which, combined with the teachings of Scholz and Lowell, leads to the instant invention.

21. Regarding Applicant's argument that "Prior art teaches away from combination of Scholz, Lowell and Gonzalez", the examiner finds nothing within these references teaching away from the current invention; there is no teaching in Scholz that an autotransformer could not be substituted for the resistive voltage divider (R1, R0, and R2) of Fig. 1 (in fact, the use of the general term "impedance means" throughout the disclosure and in the claims to refer to the tapped voltage divider suggests that impedance elements consisting of other than resistors is contemplated), nor that a continuously-adjustable impedance means could not be used; Lowell discloses no teaching that a continuously-adjustable autotransformer (variac) could not be used in

place of the discretely-adjustable autotransformer of Fig. 2; Lowell does not teach that a load resistance (such as RB of Scholz Fig. 1) could not be connected between point 100 and point 32 in the circuit of Fig. 2; and Gonzalez does not teach that a load resistor could not be similarly connected to a continuously-adjustable autotransformer (variac) in the same manner. In fact, from Gonzalez's warning, "don't turn the variac all the way down as this effectively disconnects the speakers, which is bad news for some amps", one of ordinary skill in the art would be motivated to seek means to maintain a suitable load impedance over a full range of variac settings, such as adding a resistor such as RB of Fig. 2 of Scholz in view of the well-known fact that medium- and high-power tube amplifiers require a load impedance that approximates a predetermined value to prevent damage to the output circuitry of the amplifier. Moreover, other prior art not relied upon for the rejections made above that may teach away from the combination recited in the rejections is not relevant to the analysis of the obviousness of combining the teachings of the references cited.

22. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Thus, although the apparatus of Gonzales may not provide "constant frequencies" or constant impedance and Lowell may not provide constant impedance, the combinations recited in the present rejections of the instant claims do provide these

features.

23. Regarding Applicant's argument that Scholz does not provide constant frequencies, whereas the examiner stated at page 6, lines 1-3 of the prior Office action that Scholz inherently maintains constant proportional quality of high frequencies in applied signals, assuming a reasonably-low output impedance of the source amplifier in Fig. 1 of Scholz, the proportion of high frequencies in **applied sound signals** (i.e., the signals at the input to the circuit) would be maintained substantially constant, as claimed. Regardless, in the combination recited in the rejections, based on the combined teachings of Scholz, Lowell, and Gonzalez, the structure is the same as that claimed; and the limitation would be met by that structure to the same extent that Applicant's disclosure has enabled this functional limitation.

24. Regarding Applicant's argument that the combination of Scholz and Lowell would lead to an exclusively inductive circuit and therefore could not maintain constant proportional quality of high frequencies, the examiner has not suggested such a combination. The combination suggested by the examiner in the rejections is a resistor connected as RB in Fig. 1 of Scholz, with the tapped resistive voltage divider consisting of R1, R0, and R2 replaced by an autotransformer or variac as taught by Lowell and Gonzalez, or stated alternatively, by adding the resistor RB of Scholz to the autotransformer attenuators of Lowell or Gonzalez to maintain a constant load

impedance to the source as taught by Scholz at column 3, lines 48-50.

25. In response to applicant's argument that the combination of references cited in the rejections is "[n]ot a suggested modification of Scholz" because "there is no suggestion in the prior art to modify this particular circuit in a radical manner", the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

26. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., an inductive resistance Z0 that is a good approximation to loudspeaker ZS and first impedance means R1 that is substantially larger than the inductive resistance Z0) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Moreover, upon consideration of combining the teachings of Scholz, Lowell, and Gonzalez as cited in the rejections, one of ordinary skill in the art would have recognized that impedance requirements for an autotransformer circuit are vastly different from those of a resistive voltage divider feeding a heavy load, and would select different component values

(including impedance) accordingly. Such component selection was well within the abilities of one of ordinary skill in the art at the time the present invention was made.

***Conclusion***

27. Although Applicant requests the examiner to draft exemplary allowable claims according to MPEP 707.07(j), the examiner does not see allowable subject matter in the present disclosure; ad thus is unable to provide such claims.

28. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony M Jacobson whose telephone number is 703-305-5532. The examiner can normally be reached on M-F 11:00-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tmj  
September 8, 2004



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PRIMARY EXAMINER